

REMARKS

Reconsideration of this application, as amended, is respectfully requested.

This application has been reviewed in light of the Office Action dated July 14, 2003. Claims 1-11 are currently pending. As indicated above, Claims 3 and 6-11 have been amended. It is gratefully acknowledged that the Examiner still finds allowable subject matter in Claims 3 and 6.

In the Office Action, the Examiner has rejected Claims 1, 2, 4, 5, 7, 9, 10 and 11 under 35 U.S.C. § 103(a) as being unpatentable over *Durrant et al.* (U.S. 5,680,414), and Claims 7-9 under 35 U.S.C. § 103(a) as being unpatentable over *Czaja et al.* (U.S. 6,424,631).

As stated above, the Examiner has rejected independent Claims 1, 4, and 7 under 35 U.S.C. § 103(a) as being unpatentable over *Durrant*, and has also rejected Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over *Czaja*. However, in the rejections, it is respectfully submitted that the Examiner has misapplied the art in a number of instances.

With regards to Claim 1 the Examiner asserts that *Durrant* discloses all the elements of Claim 1 except for utilizing an inverted symbol, which the Examiner asserts would have been obvious to one skilled in the art. It is respectfully submitted that the Examiner is incorrect.

Claim 1 discloses a method in which a CDMA (Code Division Multiple Access) mobile communication system spreads a pair of symbols obtained by repeating a first symbol with a quasi-orthogonal code having a given length to transmit the spread symbols through a first antenna and spreads a second symbol and an inverted symbol of said second symbol obtained by repeating said second symbol with said quasi-orthogonal code to transmit the spread symbols through a second antenna at the same time. However, the Examiner has not addressed any of the above recitations of Claim 1, more specifically, a first antenna and a second antenna, because the Examiner is incorrectly asserting that the preamble of a claim has no patentable weight. In the Response to Arguments section of the Office Action, the Examiner cites Claim 1 as an example and cites *In re Hirao*, 535 F.2d 27, while asserting that “[a] preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone.” However, the preamble of Claim 1 does not merely recite the purpose of a process or the intended use of a structure. Further, the body of Claim 1 depends on the preamble for completeness, as it discloses which symbols are transmitted from which antennas and that the antennas are transmitting the symbols simultaneously. Therefore, it is respectfully submitted that the Examiner is incorrectly applying the law as is recited in *In re Hirao*, and as a result, the Examiner has failed to make a prima facie case in rejecting Claim 1 under 35 U.S.C. § 103(a) as being unpatentable over *Durrant*, as the Examiner has cited no section of *Durrant* that teaches a first and second antenna for respectively transmitting spread first and second symbols. In addition, *Durrant* does not disclose a first and second antenna as in independent Claim 1.

With regards to Claims 4 and 7, the Examiner asserts *Durrant* discloses all the elements of Claims 4 and 7 except for utilizing an inverted symbol, which the Examiner asserts would have been obvious to one skilled in the art. Further, as a first antenna and a second antenna are recited in the body of the Claim 4, the Examiner asserts that the “706 and 707 connections” in FIG. 10 of *Durrant* can be considered a first antenna and a second antenna, respectively. It is respectfully submitted that the Examiner is incorrect.

FIG. 10 of *Durrant* is a block diagram of a spread spectrum receiver using separable real and imaginary parts of a received spread spectrum signal. In FIG. 10, reference numerals 706 and 707 identify a real correlation signal and an imaginary correlation signal, respectively. Further, the correlation signals 706 and 707 are not wirelessly transmitted. Therefore, it is respectfully submitted that the Examiner is incorrect in alleging that the “706 and 707 connections” can be a first and a second antenna. Accordingly, it is respectfully submitted that the Examiner is incorrect in rejecting Claims 4 and 7 under 35 U.S.C. § 103(a) as being unpatentable over *Durrant*, and it is respectfully requested that the rejections of Claims 4 and 7 be withdrawn.

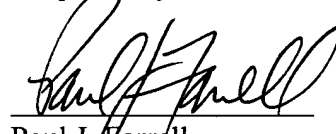
With regards to the rejection of Claim 7 under 35 U.S.C. § 103(a) as being unpatentable over *Czaja*, the Examiner asserts that although *Czaja* only shows one antenna, it would have been obvious to use two antennas as recited in Claim 7, stating that the second antenna is a mere duplication of the essential working parts of the invention. However, as was indicated in the previous response, because the second antenna in Claim 7 is used to transmit the spread second set of symbols and the first antenna is used to transmit a spread first set of symbols, the second antenna is not mere a duplication of a necessary part. Rather, the second antenna is itself a necessary part.

Therefore, it is respectfully submitted that the Examiner is incorrect in rejecting 7 under 35 U.S.C. § 103(a) as being unpatentable over *Czaja*, as there is no section of *Czaja* that discloses a second antenna, and it is respectfully requested that the rejection of Claim 7 be withdrawn.

Accordingly, it is respectfully submitted that Claims 1, 4, and 7 are in condition for allowance, and at least because of their dependence upon these claims, dependent Claims 2-3, 5-6, and 8-11 are also in condition for allowance.

In view of the preceding amendments and remarks, it is respectfully submitted that all pending claims, namely Claims 1-11, are in condition for allowance. Should the Examiner believe that a telephone conference or personal interview would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,



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